CULTURAL RESOURCES SURVEY OF THE LOCKHART 115kV PROJECT, CHESTER COUNTY, SOUTH CAROLINA

CHICORA RESEARCH CONTRIBUTION 446

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 8.7 mile corridor and substation site that is located west of the town of Chester in Chester County, South Carolina. The work was conducted to assist Central Electric Power Cooperative, Inc. in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor and lot are to be used by Central Electric Power Cooperative for the construction of a transmission line and substation. The transmission line will connect an existing substation in the south to the new substation site at the north end near SC 9. The topography is sloping with several drainages located along the route.

The proposed route will require the clearing as well as the construction of the proposed transmission line and substation. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study, an area of potential effect (APE) 0.5 mile around the proposed transmission project was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified seven (38CS96-1, 38CS96-2, 38CS96-3, 38CS97-99, and 38CS213) previously recorded sites. The information on site 38CS96 is confusing. Even though three separate sites appear on the SCIAA topographic maps, only one site form was recorded (site form by John B. Green 11/12/1977). In addition, the site form only appears to discuss the 38CS96-2 site, which is a Middle to Late Archaic surface scatter. A memo was written by James F. Bates and Richard Allen Warner (n.d.) that recommended "clearance be granted" for the project (which also includes 38CS97-99). This memo briefly discusses 38CS96-1, which is also a Middle to Late Archaic site, and 38CS96-3, which is a prehistoric and historic site. Site 38CS97, also mentioned in the same memo, is an unknown prehistoric scatter. Sites 38CS98-99 are Middle to Late Archaic and nineteenth century historic scatters. Site 38CS213 is a prehistoric site that is recommended not eligible for the National Register of Historic Places.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites that would be eligible for the National Register of Historic Places. No such sites were found, however, an inspection of the USGS Baton Rouge 7.5' topographic map, from a SHPO survey (n.d.) had two structures circled. No additional information could be obtained about these structures.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the corridor, which was marked by stakes. All shovel test fill was screened through ¼-inch mesh with a total of 465 shovel tests excavated along the corridor. Four additional tests were excavated in the substation lot.

As a result of these investigations five sites (38CS356-360) and one isolated find (38CS00) were identified. Site 38CS356 is a surface scatter of prehistoric lithics; site 38CS357 is a surface and subsurface scatter of prehistoric lithics; site 38CS358 is a surface scatter of prehistoric lithics; site 38CS359 is a prehistoric and eighteenth to nineteenth century surface scatter; and 38CS360 is a Middle Archaic surface scatter. All five sites are recommended not eligible for the National Register because of their lack of integrity and inability to address significant research questions. The isolated find, 38CS00, is a well that failed to

produce any nearby remains and is recommended not eligible for the National Register for its lack of data sets.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. The two structures were identified, however, only one structure (U/23/0276) appeared to retain integrity. This is a ca. 1890 brick structure that is recommended eligible for the National Register for its distinct architectural characteristics and research potential. The structure, however is not within view of the project corridor, so will not be visually impacted. In addition, one cemetery (U/23/0277) was also recorded. The cemetery is a ca. 1849 family cemetery that is potentially eligible for its information potential and its possible connection to significant persons in the area. While the transmission corridor is within view of the cemetery, it should not provide additional intrusion given the proximity to Baton Rouge Road and the extensive damage from cows.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy Jackson of Central Electric Power Cooperative in Columbia, South Carolina. The work was conducted to assist Fairfield Electric Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a corridor measuring about 8.7 miles for use as a transmission route connecting an existing transmission line to the south to the new substation lot (near SC 9) to the north in Chester County, South Carolina (Figure 1). The corridor is located just west of the city of Chester.

The corridor consists of undulating topography that dips in elevation at the various drainages along route. Vegetation along the corridor consists of mixed pine and hardwood forests, pasture, pine stands, wetland, and gullied areas.

The corridor, as previously mentioned, is intended to be used as a transmission route for a 115kV line. Landscape alteration, primarily clearing, subsequent erection of poles and other facilities, erecting lines, and long-term maintenance of the transmission line will cause damage to the ground surface and any archaeological resources that may be present in the survey area.

Construction, operation, and maintenance of the transmission line may also have an impact on historic resources in the project area. Although the project will not remove any structures, transmission routes (as well as other above grade projects) may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) 0.5 mile radius around the proposed corridor to attempt to locate any structures that may be visually impacted by the proposed project.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Chester County.

We were requested by Mr. Tommy Jackson of Central Electric Power Cooperative to conduct a cultural resources survey for the project on February 17, 2006. This work included examination of the site files at the S.C. Institute of Archaeology and Anthropology. As a result of that work, seven previously identified sites (38CS96-1, 38CS96-2, 38CS96-3, 38CS97-99, and 38CS213) were found. The information on site 38CS96 is confusing. Even though three separate sites appear on the SCIAA topographic maps, only one site form was recorded (site form by John B. Green 11/12/1977). In addition, the site form only appears to discuss the 38CS96-2 site, which is a Middle to Late Archaic surface scatter. A memo was written by James F. Bates and Richard Allen Warner (n.d.) that recommended "clearance be granted" for the project (which also includes 38CS97-99). This memo briefly discusses 38CS96-1, which is also a Middle to Late Archaic site, and 38CS96-3, which is a prehistoric and historic site. Site 38CS97, also mentioned in the same memo, is an unknown prehistoric scatter. Sites 38CS98-99 are Middle to Late Archaic and nineteenth century historic scatters. Site 38CS213 is a prehistoric site that is recommended not eligible for the National Register of Historic Places.

Initial background investigations also incorporated a review of the site files at the South Carolina Department of Archives and History. As a result of that work, no sites were found on the

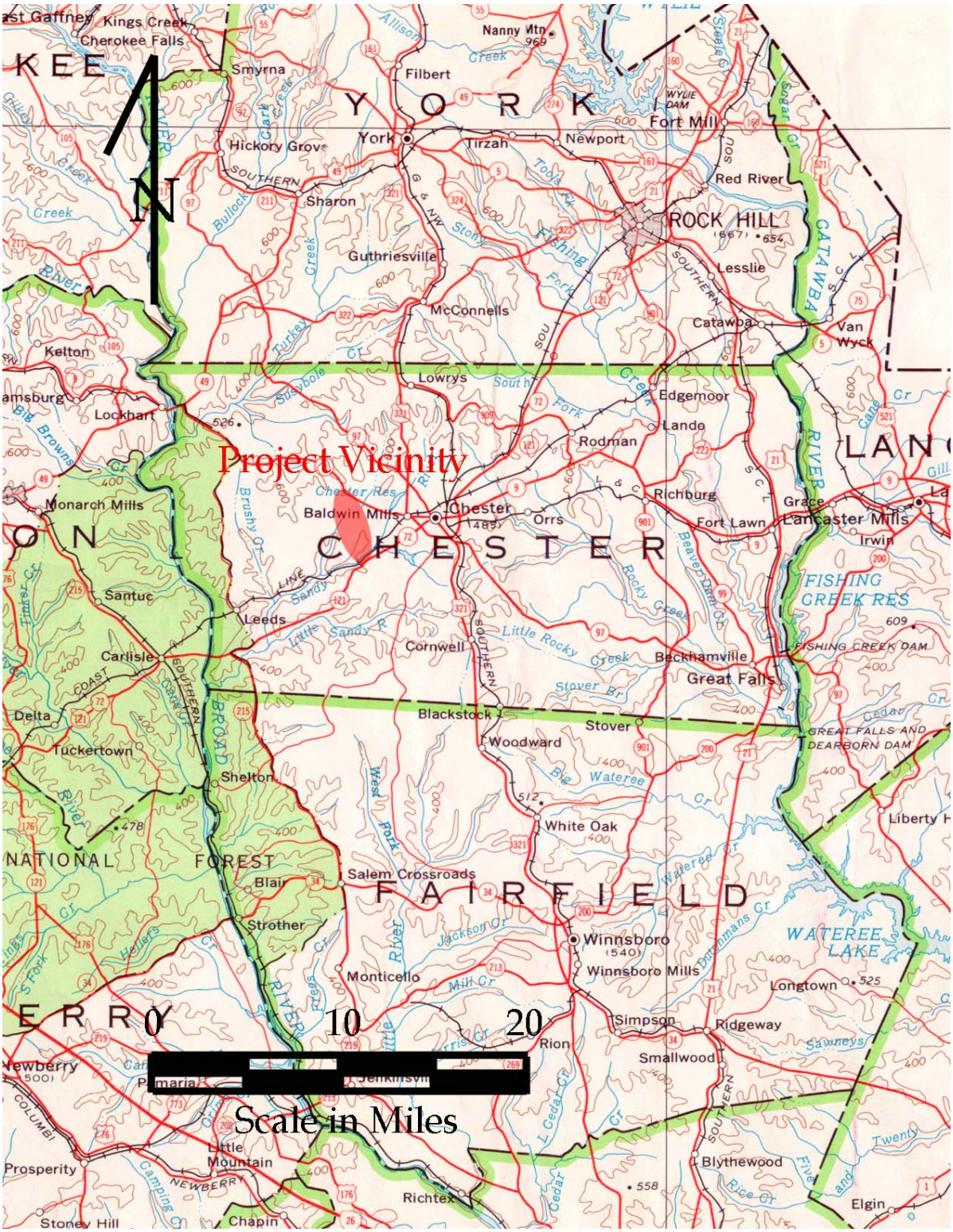

Figure 1. Project vicinity in Chester County (basemap is USGS South Carolina 1:500,000).

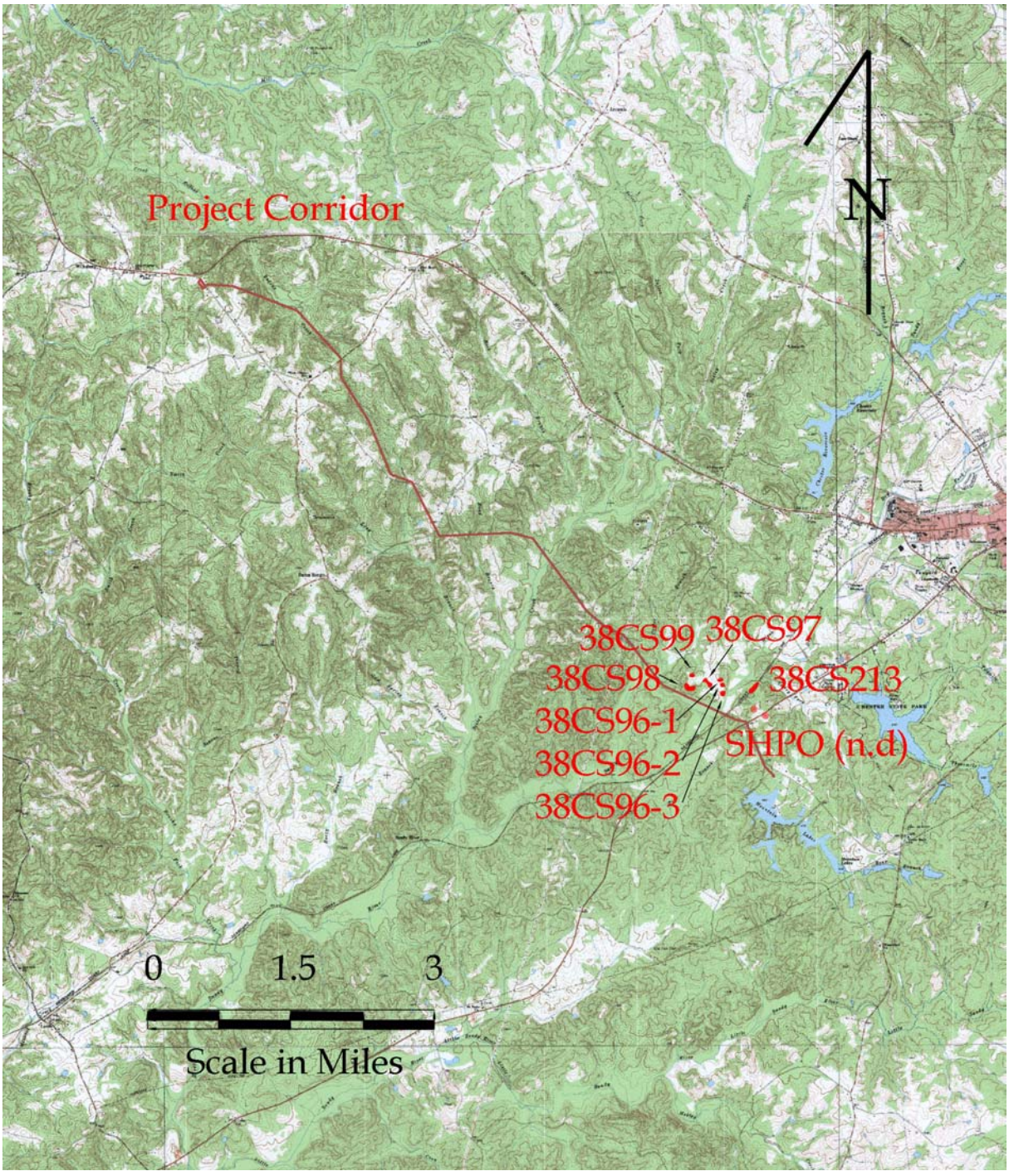

Figure 2. Project corridor with previously identified archaeological and architectural sites (SHPO n.d.) (basemap is USGS Baton Rouge 7.5′).

SHPO GIS. However, an inspection of the hard copies of the Baton Rouge 7.5′ topographic map identified two structures, which were circled, but contained no additional information. David Kelly, of the S.C. Department of Archives and History, was also unable to provide any information on these resources.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from May 3-5, 2006 by Ms. Julie Poppell and Ms. Kim Igou under the direction of Dr. Michael Trinkley.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

ENVIRONMENTAL BACKGROUND

Physiographic Province

Chester County is bordered to the north by York County, to the east by Lancaster County, to the south by Fairfield County, and to the west Chester County is bounded by the Broad River, which separates it from Union County.

The county is located within the Piedmont physiographic area and has a topography ranging from nearly level to steep. Slopes can range from 0 to 40% (Hardee 1982). Slopes in the project area range from 1 to 15%.

The project area, as previously discussed is part of the Piedmont. Possibly part of the peneplain, the Piedmont is characterized by the dendritic stream patterns. It is also characterized by a range of metavolcanic, quartz, and quartzite materials used by Native Americans for stone tools. To the southeast of the county is the Coastal Plain, where the topography changes dramatically, the hilly upper Coastal Plain giving way to the broad expanses of relatively flat, level ground associated with the lower Coastal Plain. These areas provide sources for Coastal Plain cherts, also used extensively for tool manufacture.

In the survey area, the elevations range from about 375 to 620 feet above mean sea level (AMSL). The lowest areas slope down toward drainages such as Rodens Creek, Seeley Creek, and Sandy Carter Branch.

Geology and Soils

Most of the rocks of the Piedmont are gneiss and schist, with some marble and quartzite (Hasselton 1974). Some less intensively metamorphosed rocks, such as slate, occur along the eastern part of the province from southern Virginia into Georgia. This area, called the Slate Belt, is characterized by slightly lower ground with wider river valleys. Consequently, the Slate Belt has been favored for reservoir sites (Johnson 1970), as well as prehistoric occupation (see Coe 1964). In Chester County, many of the Piedmont soils are weathered from argillites rich in silica and alumina. Other soils are formed in saprolite

Figure 3. View of pasture along the corridor.

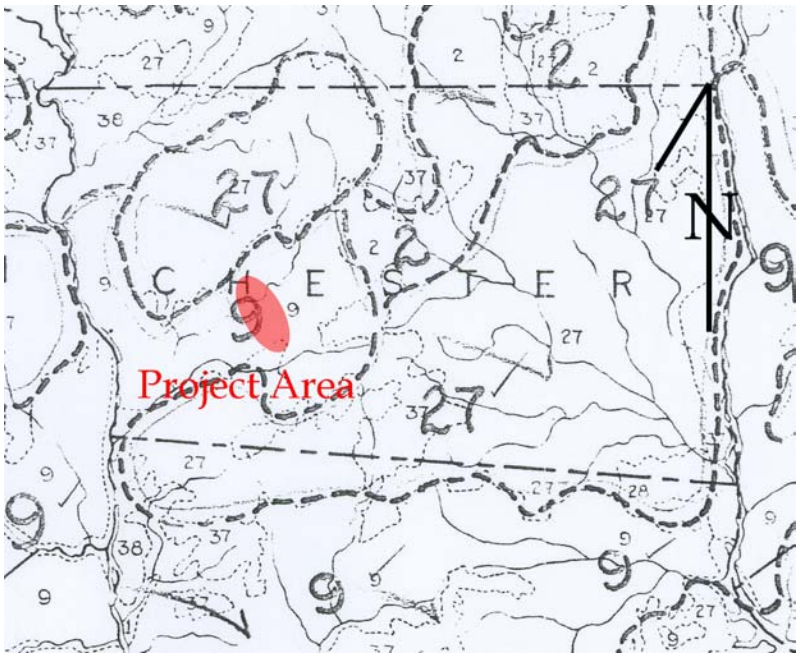

Figure 4. Portion of the 1934 *Reconnaissance Erosion Map of the State of South Carolina* showing the project vicinity.

that weathered from crystalline rocks and "Carolina slates". Soils from the river floodplains formed in sediment that washed from the uplands of the Piedmont province.

The project crosses ten different types of soils, including nine well-drained (Appling, Catula, Hiwassee, Madison, Mecklenburg, Rion, Toccoa, Wilkes, and Winnsboro) soils and one somewhat poorly drained (Chewacla) soil.

The one somewhat poorly drained soil, Chewacla loam, is only found at Rodens Creek. This soil has an A horizon of brown (10YR5/3) loam to a depth of 1.2 feet over a pale brown (10YR6/3) clay loam to a depth of 1.8 feet.

The rest of the corridor is located on well-drained soils. Appling soils have an Ap horizon of brown (10YR4/3) loamy sand to 0.7 foot over a strong brown (7.5YR5/8) clay to a depth of 1.7 feet. Catula soils have an Ap horizon of dark yellowish brown (10YR4/4) sandy loam to 0.6 foot over a strong brown (7.5YR5/6) sandy loam to 1.0 foot in depth. These soils also tend to be eroded. Hiwassee soils have an Ap horizon of dark reddish brown (5YR3/4) sandy loam to 0.3 foot over a dark red (2.5YR3/6) sandy clay loam to 0.9 foot. Madison soils have an Ap horizon of brown (7.5YR4/4) sandy loam to 0.3 foot in depth over a red (2.5YR4/8) sandy clay to a depth of 1.4 feet. The Mecklenburg Series has an Ap horizon of reddish brown (5YR4/3) fine sandy loam to 0.6 foot in depth over a dark red (2.5YR3/6) sandy clay loam to 0.9 foot in depth. Rion soils, which have slopes from 15-40%, have an A horizon of very dark grayish brown (10YR3/2) loamy sand to 0.2 foot in depth over a brown (10YR4/3) loamy sand to 0.6 foot in depth. The subsoil is a brownish yellow (10YR6/6) sandy loam to 1.0 foot in depth. Toccoa soils have an A horizon of brown (7.5YR4/4) loam to 0.1 foot over a dark reddish brown (5YR3/4) sandy loam to a depth of 0.7 foot. Wilkes soils, which have a slope of 6 – 40%, have an A horizon of pale brown (10YR6/3) sandy loam to a depth of 0.6 foot over a mottled yellowish red (5YR5/8) and yellowish brown (10YR5/4) clay to a depth of 0.8 foot. Winnsboro soils have an Ap horizon of dark brown (10YR4/3) sandy loam to 0.4 foot in depth over a light olive brown (2.5Y5/4) sandy loam to 0.8 foot in depth. The subsoil is a yellowish brown (10YR5/6) clay to 1.3 feet in depth.

The 1934 *Reconnaissance Erosion Map of the State of South Carolina* (Figure 4) shows the project area (identified as "9") in what is described as "Destroyed for Cultivation by Gullies." The project corridor did cross several large gullies. Even the surrounding area (labeled "27") is described as having 25% to 75% of the surface gone and occasional gullies. The nearby area shown as "2" is described as 25% to 75% of the surface gone.

Figure 5. View of gullies found along the corridor.

wetland. As was previously mentioned, several gullies were also encountered along the corridor.

Climate

Elevation, latitude, and distance from the coast work together to affect the climate of South Carolina, including the Piedmont. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses that cross the mountains are warmed somewhat by compression before they descend on the Piedmont.

Consequently, the climate of Chester County is temperate. The winters are moderately cold and summers are hot and humid (Hardee 1982). Rainfall in the amount of about 47 inches is adequate, although less than in some neighboring counties.

Floristics

Piedmont forests generally belong to the Oak-Hickory Formation as established by Braun (1950). The project area crosses several different types of vegetation including mixed pine and hardwood forests, planted pines, pasture, and

PREHISTORIC AND HISTORIC OVERVIEW

Previous Research

Relatively little research has been done in Chester County. A total of 12 of 41 projects were performed in the Sumter National Forest (Derting et al. 1991), while almost all of the other projects are compliance related.

One, more modern project, performed in 2005, involved the survey of a road connector just east of Chester (Trinkley and Southerland 2005). No sites were found along the route.

Prehistoric Overview

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.[1] Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Miche suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams

[1] While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

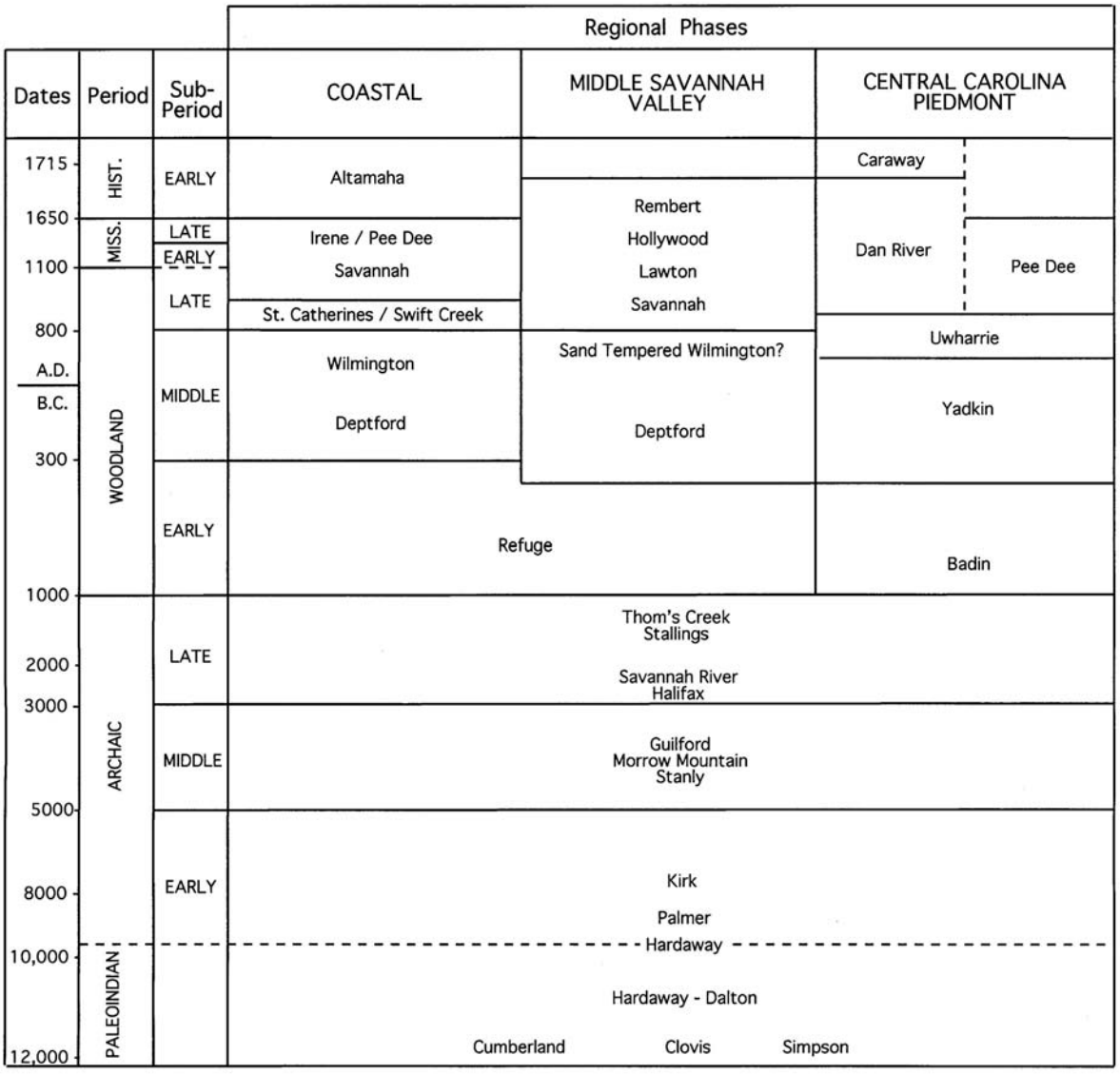

Figure 6. Generalized cultural sequence for South Carolina.

(1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and

foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.[2], does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts -- these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant

[2] The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point. Originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups, which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact, they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one that includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations that focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

> the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain microenvironments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see

Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine, which reduced the oak-hickory nut masts, which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery, which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.[3] This pottery is identified as having very fine sand in the paste with an occasional pebble.

[3] The ceramics suggest clear regional differences during the Woodland, which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

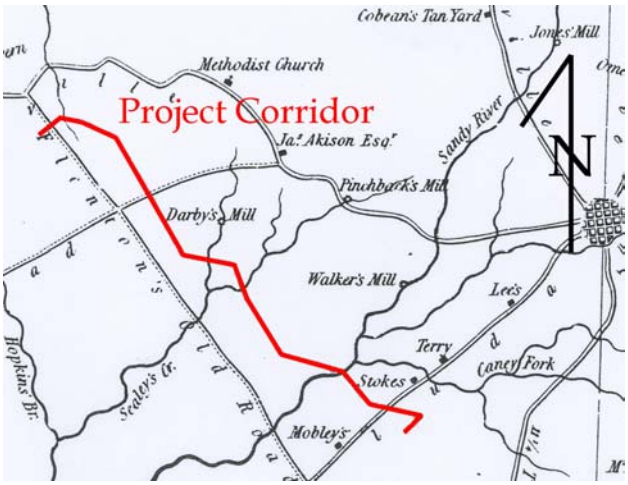

Figure 7. Portion of Mills' *Atlas* showing the project corridor.

Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery, little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects, the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historic Overview

Early settlers in Chester, around 1750, appear to be emigrants from Pennsylvania and Virginia (Mills 1972 [1826]). Chester County was named for a county in Pennsylvania from where many of the emigrants originated (Mills 1972 [1826]).

Chester County has the same boundary since at least 1785 when it was created from the Camden District. In 1791, Chester was part of the Pinckney District, while in 1800, the name was changed from Pinckney to Chester, but the boundaries stayed the same.

In 1826, Mills reports that the Chester District:

> Is well adapted to the growth of corn, wheat, rye, oats, and in short, all grains; but owing to the wretched state of its agriculture, the small grains are not a profitable crop (Mills 1972 [1826]:490).

At this time the census of the Chester

District reported 14,189 people – 9,611 whites, 4,542 slaves, and 36 free blacks. Mills' *Atlas* (Figure 7) shows no settlements along the project corridor, however, three mills (Walker's, Pinchback's, and Darby's) are shown along the drainages that the corridor crosses.

Mills (1972 [1826]) praises the education system in Chester District. He describes "able teachers" and the "excellent system" of education in the District. Overall, Mills appears to have a positive description of the District recounting "elegant" houses and people with "respectable standing" (Mills 1972 [1826]).

This feeling may have changed by 1896 when a man looking to purchase a mill in Chester County but decided against it citing,

> I was so impressed with the uninviting surroundings, lack of educational facilities and civilized society, etc., that I decided that I would not move my family down there for the whole outfit as a gift (Carlton 1982).

The population in 1850 shows a decrease in the number of whites (n=8,003), while the number of slaves (n=9,887) and free blacks (n=148) increased dramatically (DeBow 1854). However, the total population was increasing in Chester County every year.

An 1883 account reports that two cotton mills were located in Chester County (State Board of Agriculture 1883:582). Both factories were located along Fishing Creek and while not the most profitable cotton mills in the state, they still produced considerable competition to the others in the state.

The city of Chester, known as Chesterville in 1883, was the largest town in the county and boasted 87 stores (State Board of Agriculture 1883: 706). Three railroad lines converged in Chesterville, which kept industry competitive around this portion of the Piedmont, due to its proximity to Charlotte and Columbia.

By 1920, the population of whites increased with 13,996 inhabitants and 19,338 blacks with the total population being 33,389 (Department of Agriculture, Commerce and Industries 1927).

With the numerous creeks and rivers around the county, Chester made use of the hydroelectric power with five stations. In 1927, Chester county was known as "one of the chief centers of power development in the Southern states (Department of Agriculture, Commerce and Industries 1927). It was by this year that cotton, still a prosperous crop, was produced in three mills in the county.

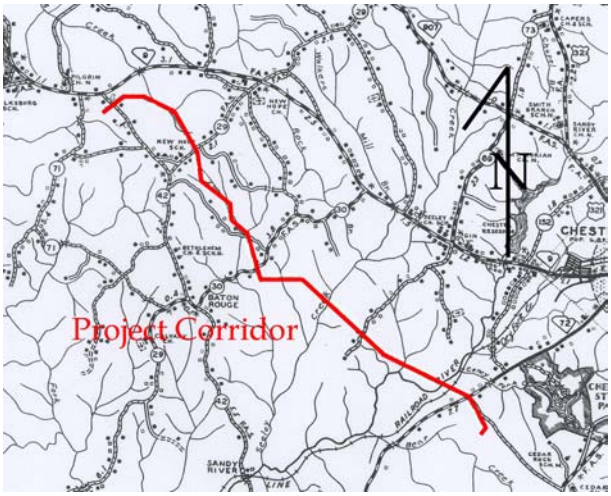

Figure 8. Portion of the 1942 *General Highway and Transportation Map of Chester County* showing the project corridor.

The 1942 *General Highway and Transportation Map of Chester County* (Figure 8) shows the project corridor with several structures nearby. However, none of these structures were encountered during the survey.

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the center line of the corridor, which had a 75 foot right-of-way. Four additional shovel tests were excavated within the substation lot.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications. A total of 465 shovel tests were excavated along the corridor with additional testing at each of the three identified sites. Four shovel tests were excavated in the substation lot.

The GPS positions were taken with a WAAS enabledGarmin GPS 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. WAAS, or

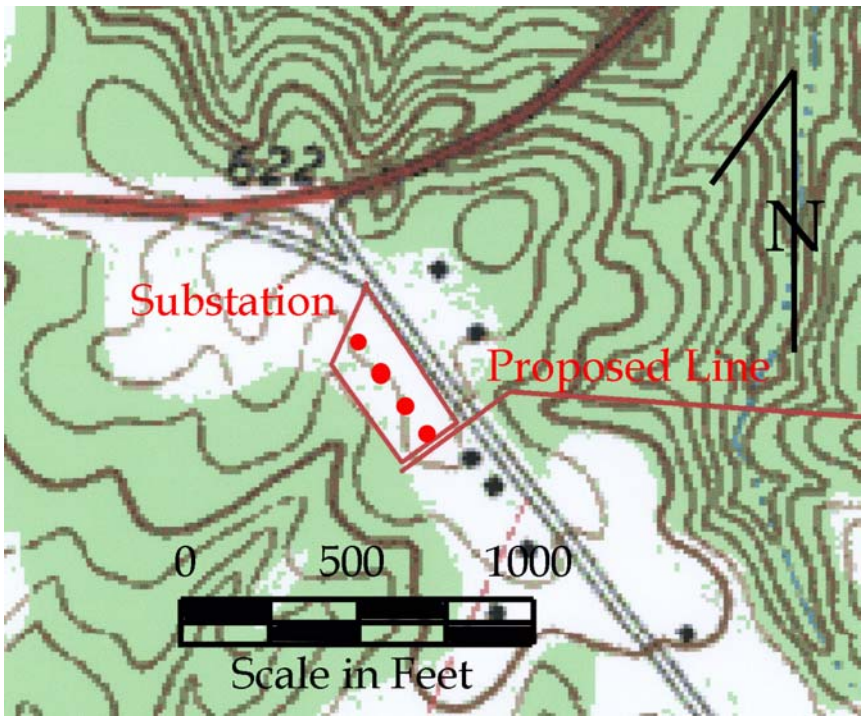

Figure 9. Substation lot showing the placement of shovel tests.

Wide Area Augmentation System, is a system of satellites and ground stations that provide GPS signal corrections, yielding higher position accuracy – generally an accuracy of 10 feet or better 95% of the time. Both are vital concerns for the study area.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource, we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History. As previously mentioned, Chester County has not received a comprehensive county-wide arch-itectural survey. The eastern portion of Chester County received a survey in 1981-2 by the Catawba Council of Governments while the SHPO (n.d) also performed a survey, but no report was ever produced. The Catawba Regional Planning Council of Governments (1976) and the Central Piedmont Regional Planning Commission (1971) have a small-scale survey of some select historic sites, however, they do not include all historic sites in the county.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of

Figure 10. View of existing substation toward the southern portion of the corridor.

location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural re-mains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites

Figure 11. Shovel testing along the corridor.

being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites, the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials C the physical items used on and in the property C are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete.

Analysis of the collections followed professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of prehistoric remains follow such authors as Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986).

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey five archaeological sites (38CS356-360) and one isolated find (39CS00) were recorded (Figure 12). Site 38CS356 is a surface scatter of prehistoric lithics; site 38CS357 is a surface and subsurface scatter of prehistoric lithics; site 38CS358 is a surface scatter of prehistoric lithics; site 38CS359 is a prehistoric and eighteenth to nineteenth century surface scatter; and 38CS360 is a Middle Archaic surface scatter. All five sites are recommended not eligible for the National Register for lack of integrity and the inability to address significant research questions. The isolated find (39CS00) is a well that is recommended not eligible for the National Register for its lack of data sets that would be needed to address significant research questions.

The architectural survey identified two sites (U/23/0276 and U/23/0277) within the APE that may be potentially eligible for the National Register. Site U/23/0276 is a ca. 1890 house that is potentially eligible for the National Register for its architectural characteristics and information potential (Criteria C and D). Site U/23/0277 is a ca. 1849 family cemetery that is potentially eligible for the National Register for its information potential and its possible connection to significant persons of the Chester area (Criteria B and D).

Archaeological Resources

38CS356

Site 38CS356 (Figure 13) is a surface prehistoric lithic scatter located on a pine and hardwood ridge top at an elevation of about 600 feet AMSL. Thick underbrush surrounds the corridor. A GPS UTM at the site is 466963E 3844453N (NAD27 datum).

While shovel testing was performed along the corridor, all the remains were found at the surface, generally between Station 16+20 and 23+58. Testing was performed at 100-foot intervals through the site area, however, none of the ten tests were positive. The ridge top was found to be highly eroded and sloping down toward the southeast and to the northwest toward creeks.

Additional testing was not performed off the project corridor since only a 75-foot right-of-way will be affected. It is likely that the site extends off the sides, however erosion is just as significant outside the corridor and remains found downslope will have lost their locational integrity.

Soils in the area generally represent the Cataula Series. These are eroded with an Ap horizon of dark yellowish brown (10YR4/4) sandy loam to 0.6 foot over a strong brown (7.5YR5/6) sandy loam to 1.0 foot in depth. The site, however, produced a yellowish red (5YR5/6) sandy clay at the surface, indicating at least 1.0 foot of erosion.

All of the artifacts are quartz and include 27 flakes, seven cores, and one biface. No diagnostic artifacts were found. These artifacts were found in an area about 800 feet east-west by 450 north-south.

There is no indication of any site stratigraphy or features and there appears to be exceptional erosion. Consequently, site integrity is very low.

This site does not contain the data sets or the preservation necessary to address significant research questions. The site is recommended not eligible for inclusion on the National Register of

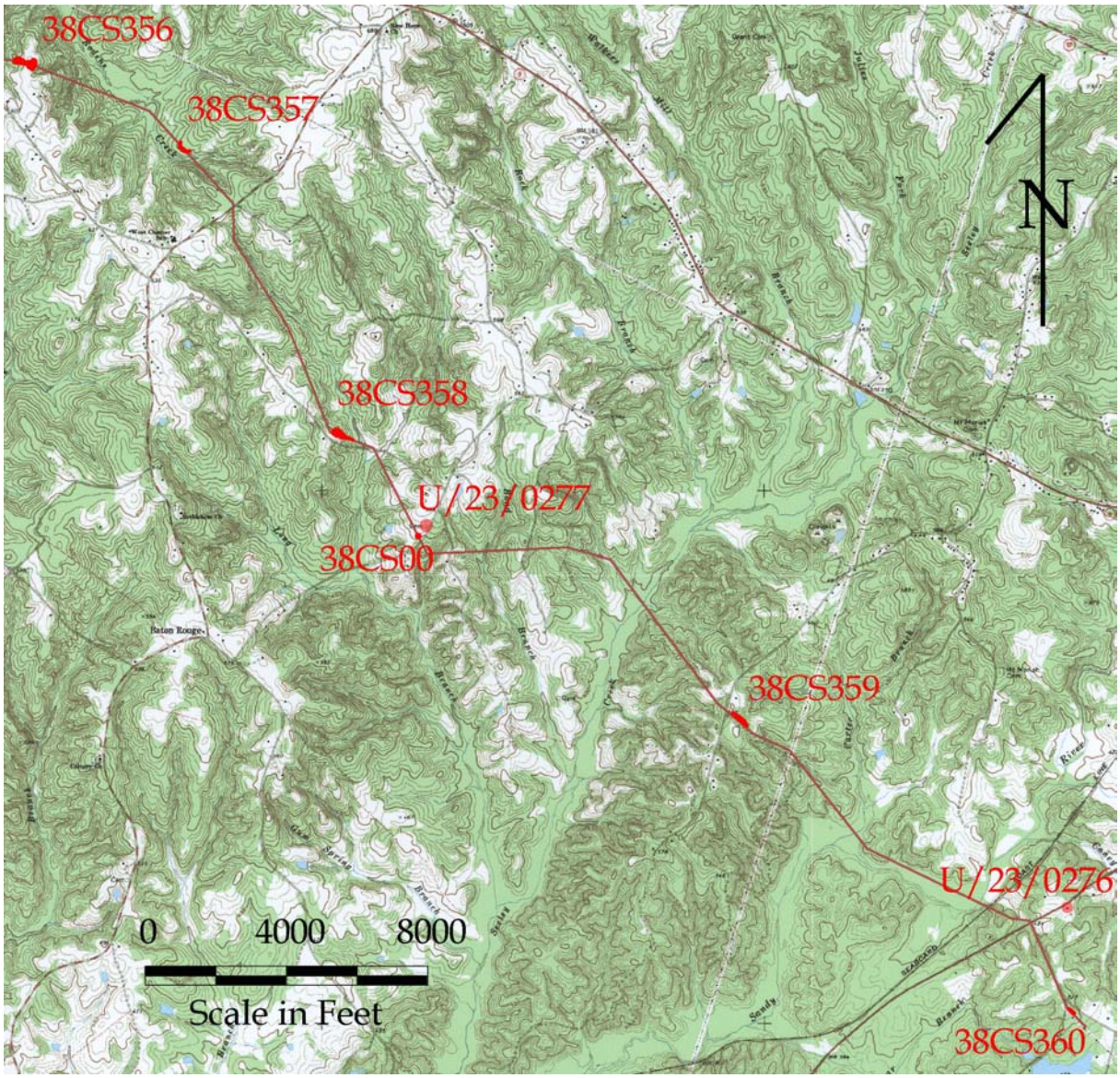

Figure 12. Portion of the Baton Rouge topographic map showing the identified sites.

Historic Places and no additional management activities are recommended pending the review and concurrence of the State Historic Preservation Office.

38CS357

Site 38CS357 (Figure 14) consists of a surface and subsurface scatter of prehistoric lithics situated on in the right-of-way on a ridge side slope at an elevation of about 550 feet AMSL. A central UTM coordinate is 468280E 3843743N (NAD27 datum).

The site was first discovered through a positive shovel test at Station 70+16. Additional testing was performed at 25-foot intervals and produced four positive tests. A small surface scatter was also recorded. No testing was performed outside the 75-foot right-of-way of the

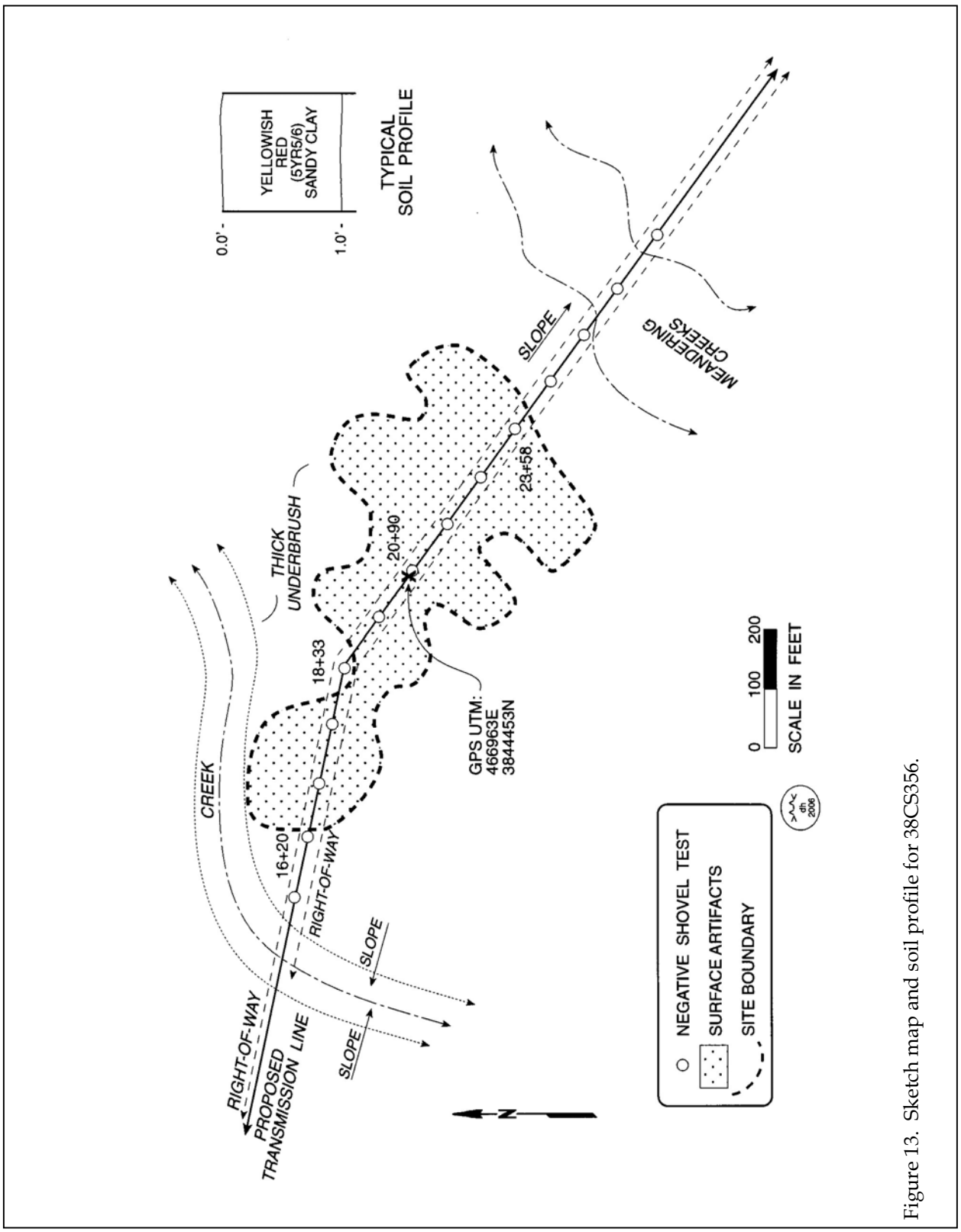

Figure 13. Sketch map and soil profile for 38CS356.

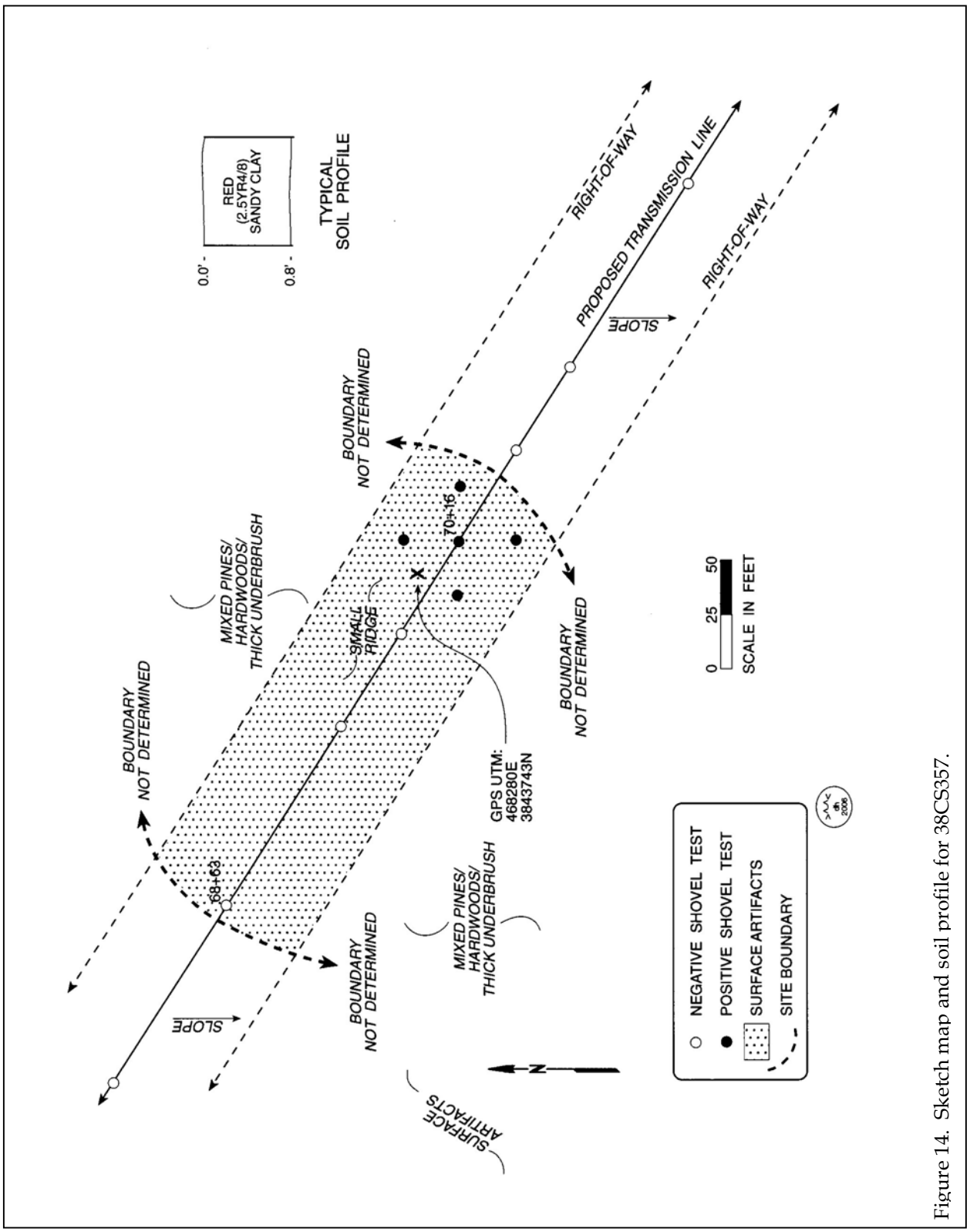

Figure 14. Sketch map and soil profile for 38CS357.

corridor, however the northwest and southeast sides of the corridor past the side slope down.

This area generally produces Madison soils, which have an Ap horizon of brown (7.5YR4/4) sandy loam to a depth of 0.3 foot over a red (2.5YR4/8) sandy clay to 1.4 feet in depth. These eroded soils can occur on slopes up to 25%. However, shovel tests in the field failed to produce the brown surface layer, showing at least 0.3 foot of erosion.

As previously mentioned, only quartz lithics were recovered. This includes 44 flakes and eight cores. An estimated site dimension, given the positive shovel tests and the surface scatter, is 250 feet east-west by 175 feet north-south. No shovel testing was performed outside the corridor given the thick vegetation and the fact that the transmission line will not damage the area beyond the right-of-way. However, given the slope and high erosion of the area, it is likely that additional remains will have lost locational integrity.

No diagnostic artifacts are present in the assemblage. No features (potentially recognized by darker soils, clusters of fire cracked rock, concentrations of artifacts, or deeper deposits) were identified in shovel testing. The only data sets present are limited and not particularly useful for addressing significant research questions.

In addition, there is clear evidence of erosion at the site, with the A horizon lost. This site appears to represent a diffuse scatter of flakes resulting from tool maintenance, probably during the Archaic (although no diagnostic remains are present). Regardless, because of the site's inability to address significant research questions and damaged site integrity, it is recommended not eligible for inclusion on the National Register of Historic Places. No additional site management activities are recommended pending the review and concurrence of the State Historic Preservation Office.

38CS358

Site 38CS358 (Figure 15) is a surface scatter of prehistoric lithics situated on a ridge top at an elevation of 520 feet AMSL. A central UTM coordinate is 469622E 3841263N (NAD27 datum).

While shovel testing was performed at 100-foot intervals along the corridor, the site, which is covered in a mixed pine and hardwood forest, was identified through a surface collection. No positive shovel tests were found. The surface collection covered an area about 650 feet east-west by 300 feet north-south.

Typically, shovel tests in the area produce Cataula soils. These eroded soils have an Ap horizon of dark yellowish brown (10YR4/4) sandy loam to 0.6 foot over a strong brown (7.5YR5/6) sandy loam to 1.0 foot in depth. The site, however, produced a yellowish red (5YR5/6) sandy clay at the surface, indicating at least 1.0 foot of erosion. Modern trash piles and logging debris were also present in and around the site area indicating additional disturbance.

The recovered artifacts include 25 quartz flakes, six quartz cores, seven quartz bifaces, and two quartz fragments of an unidentified projectile point. The site, much like the previous sites, appears to represent a small, diffuse scatter of flakes resulting from tool maintenance. Regardless, the lack of data sets make the site unable to address significant research questions. In addition, the site's integrity has been damaged through erosion, logging, and modern trash piles. Site 38CS358 is recommended not eligible for the National Register of Historic Places. No additional management activities are recommended pending the review and concurrence by the State Historic Preservation Office.

38CS359

Site 38CS359 (Figure 16) is a surface scatter of prehistoric lithics and a small historic component. It is located on a ridge saddle and side

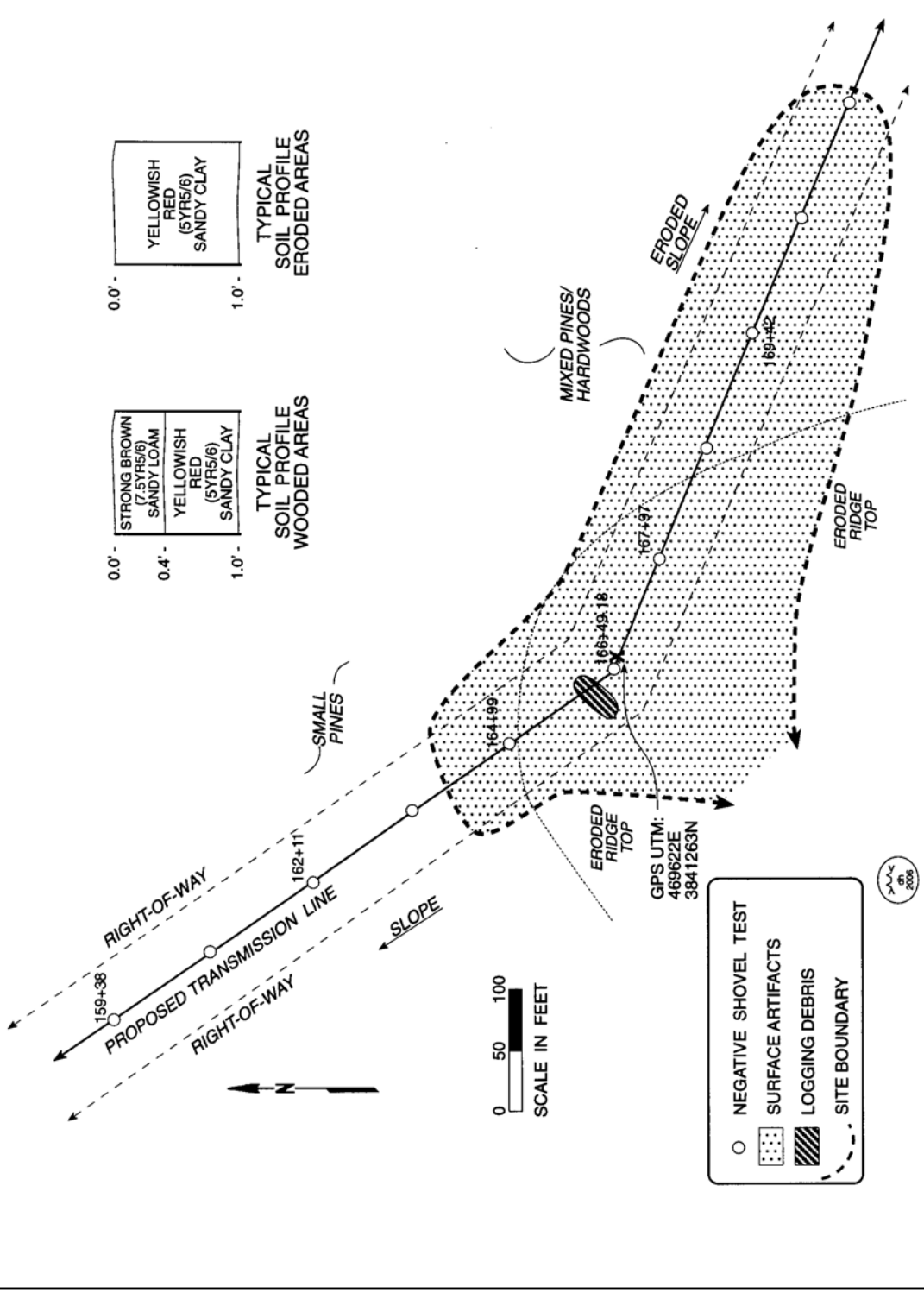

Figure 15. Sketch map and soil profile for 38CS358.

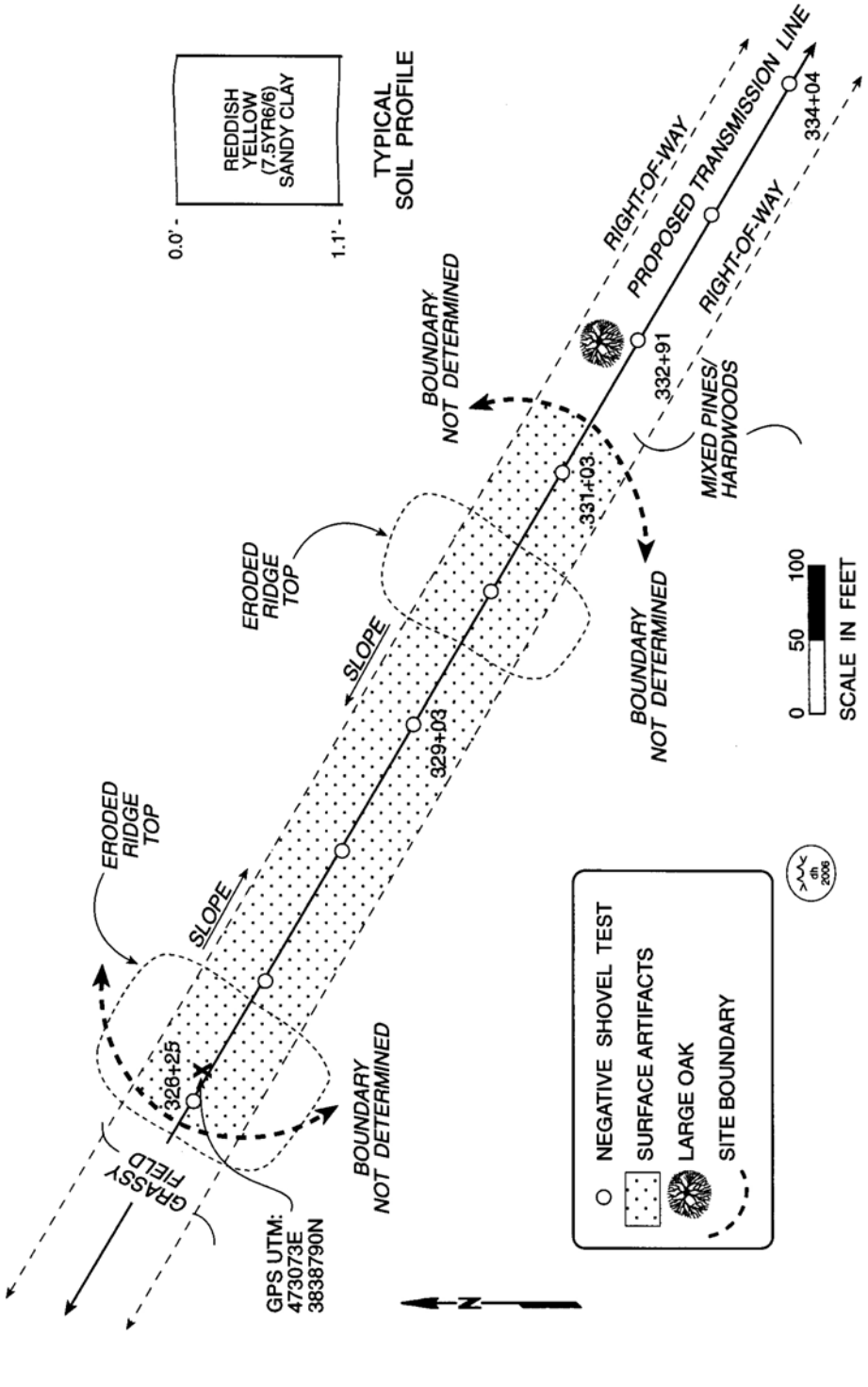

Figure 16. Sketch map and soil profile for 38CS359.

slope at an elevation of about 530 feet AMSL. A central UTM coordinate for the site is 473073E 3838790N (NAD27 datum).

While shovel testing was performed along the corridor, this site was discovered by its surface scatter. Seven shovel tests were excavated through the corridor where the site is located, however, all were negative. Test profiles in the area should represent Cataula soils, which have an Ap horizon of dark yellowish brown (10YR4/4) sandy loam to 0.6 foot over a strong brown (7.5YR5/6) sandy loam to 1.0 foot in depth. The site, however, produced a yellowish red (5YR5/6) sandy clay at the surface, indicative of at least 1.0 foot of erosion. Modern trash piles and logging debris was also present in and around the site area indicating additional disturbance.

The recovered artifacts include 25 quartz flakes, one piece of black glass, one cable pearlware, and one undecorated whiteware. The prehistoric flakes are not diagnostic. The pearlware has a date range from 1790 to 1820 while the whiteware is later, being produced from 1813 to 1900. Black glass was popular in the eighteenth and nineteenth centuries (Jones and Sullivan 1985:14). The site may span the late eighteenth and early nineteenth centuries.

In addition, close to 1.0 foot of the original soils are eroded. The 1934 *Reconnaissance Erosion Map* for South Carolina shows the area destroyed for cultivation by gullies. In fact, the site is cradled between two downhill slopes, suggesting that the site was produced through erosion rather than through domestic occupation. An estimated site dimension is 475 feet east-west by 200 feet north-south, although the site likely extends beyond the corridor right-of-way.

It is unlikely this site contains the information needed to address significant research questions such as diet and status and site integrity is severely damaged. The site is therefore recommended not eligible for the National Register of Historic Places. No additional management activity is recommended pending the review and concurrence of the State Historic Preservation Office.

38CS360

Site 38CS360 (Figure 17) is a small surface scatter of prehistoric lithics. It is located on a ridge saddle and side slope at an elevation of about 530 feet AMSL. A central UTM coordinate is 476025E 3836095N (NAD27 datum).

Shovel testing was performed along the corridor, however, the site was identified from the surface scatter of artifacts. The scatter is located in an existing transmission line corridor.

No positive tests were encountered, however profiles resembled Winnsboro soils. These soils have an Ap horizon of dark brown (10YR4/3) sandy loam to 0.4 foot in depth over a light olive brown (2.5Y5/4) sandy loam to 0.8 foot in depth. The subsoil is a yellowish brown (10YR5/6) clay to a depth of 1.3 feet. The site, however, produced a reddish yellow (7.5YR6/6) sandy clay at the surface, possibly indicating the presence of Cataula soils. At any rate, the clay at the surface still indicates extensive erosion of the site.

The artifacts recovered include 13 quartz flakes, one metavolcanic flake, and one quartz Guilford point. The Guilford point is the only diagnostic artifact, dating to the Middle Archaic. No concentration of materials, possibly suggestive of specialized activity areas, were identified. No features (potentially recognized by darker soils, clusters of fire cracked rock, concentrations of artifacts, or deeper deposits) were identified in the shovel testing. Consequently, the only data sets present are limited and not particularly useful for addressing significant research questions. In addition, there is clear evidence of erosion at the site.

The site appears to represent a small, diffuse scatter of flakes resulting from tool maintenance. Because of the site's inability to address significant research questions and the

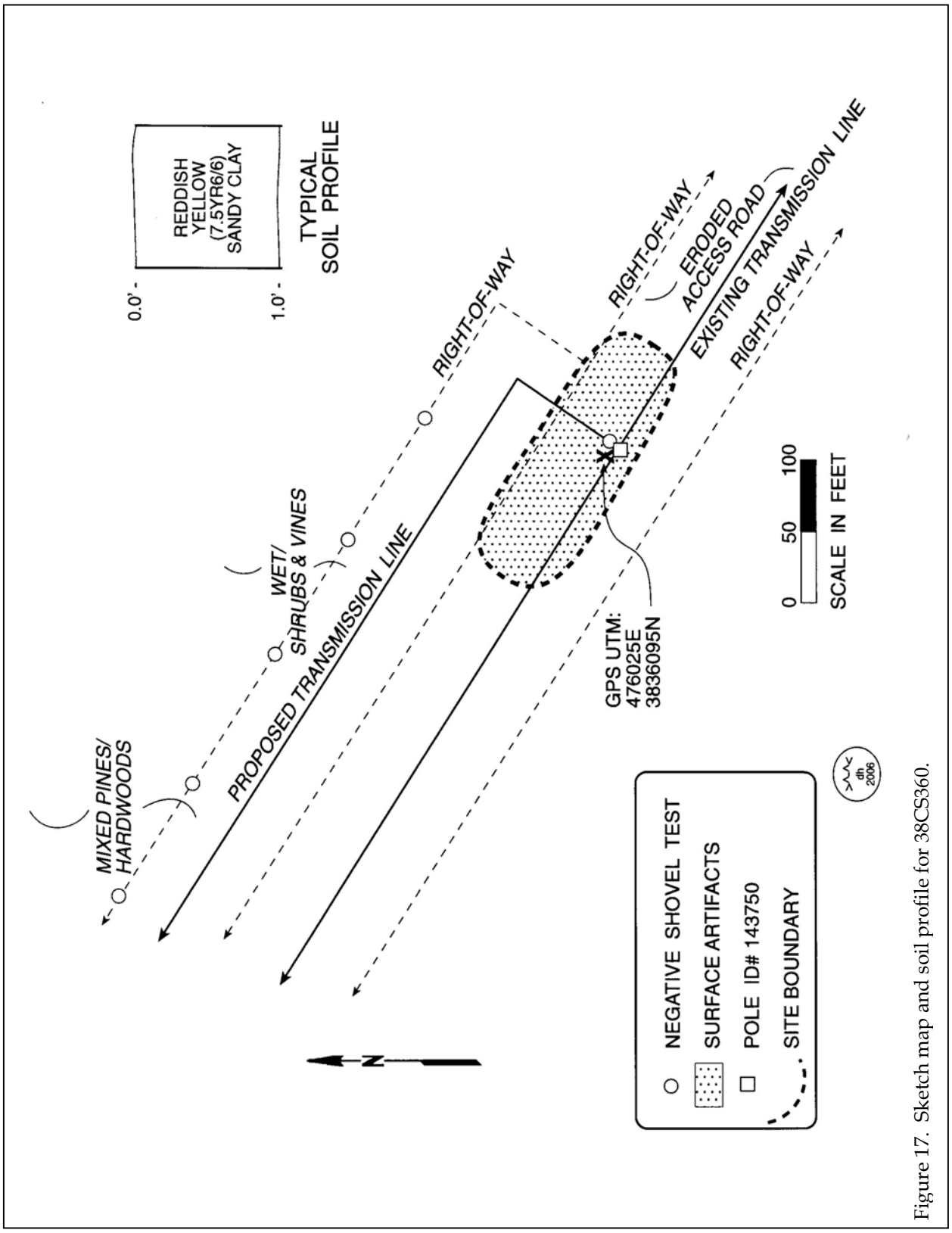

Figure 17. Sketch map and soil profile for 38CS360.

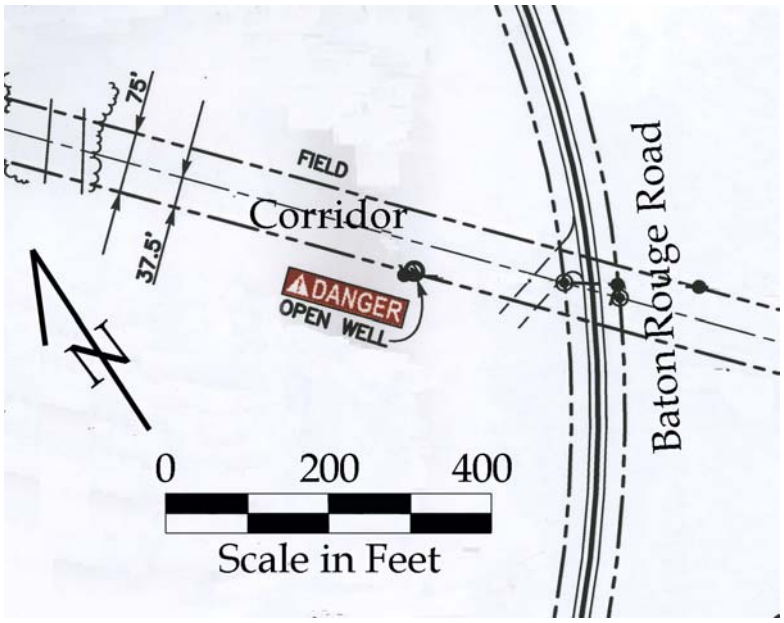

Figure 18. Plan sheet showing the well along the corridor.

damaged site integrity, it is recommended not eligible for the National Register of Historic Places. The site has also been damaged by the construction and maintenance of the existing line. No additional management activities are recommended pending the review and concurrence of the State Historic Preservation Office.

38CS00

The isolated find, 38CS00, consists of a historic well. It is located in a pasture on a ridge side slope at an elevation of about 505 feet AMSL. A central UTM coordinate for the well is 470296E 3840164N (NAD27 datum).

While shovel testing was performed at 100-foot intervals along the center line of the corridor, no remains were found. The well, which is located on the edge of the corridor right-of-way, had been recorded on modern plan sheets (Figure 18), described as an "open well." No testing was performed inside the well because it was covered with wood debris, but no artifacts or brick were found scattered in the vicinity, typical of historic wells.

Shovel testing along the corridor produced Cataula soils, which have an Ap horizon of dark yellowish brown (10YR4/4) sandy loam to 0.6 foot over a strong brown (7.5YR5/6) sandy loam to 1.0 foot in depth.

While no artifacts were found in shovel tests, a force pump typical of late nineteenth to early twentieth century wells was noticed beside the wood debris (Figure 19). While interesting to the property, the well does not have any research value – no artifacts were found scattered on the surface and no bricks were found in the vicinity. Absent of any historic settlement, it is unlikely that the well is filled with trash. It is possible that

Figure 19. View of the well, now covered with debris.

given the distance off the road in the pasture, that the well had been used to provide water to livestock (cows currently roam the pasture).

However, given the lack of data sets and the inability to address research questions, the well is recommended not eligible for the National Register. No additional management activity is recommended pending review and concurrence by the State Historic Preservation Office.

Figure 20. View of structure at 1148 West End Road.

Architectural Resources

No historic properties were recorded on the Archives and History GIS. Two structures were circled on the Baton Rouge topographic map from an unpublished survey by the SHPO. These structures were revisited and one (a twentieth century house at 1148 West End Road) was found to not retain enough integrity to warrant a National Register nomination due to modifications to the porch and the addition to the rear of the house (Figure 20). In addition, while the structure is inhabited, it is severely sagging and approaching ruinous condition (the front is supported by concrete blocks). Storm windows and siding have been added, which further damages the historic integrity of the structure. No additional management activities are recommended; however, the structure is not within view of the project area, so no affect is anticipated.

Figure 21. View of U/23/0276.

The other structure (U/23/0276) is

Figure 22. View of U/23/0277.

a ca. 1890 brick house located at 1141 West End Road (Figure 21). The house has a gable roof and a porch centered at the entrance. The windows, including those on the raised basement, are arched. There appears to be some brick repair over the right window. The Catawba Regional Planning Council of Governments (1976) briefly mentions the structure, described as the John S. Stone House. They say that the original house burned, so a brick replacement, which could not be burned "by the devil himself," was erected. The walls are described as being 14 inches thick and built of handmade bricks (Catawba Planning Council of Governments 1976). The structure is recommended eligible for the National Register for its architectural characteristics (Criterion C). However, the house cannot be seen from the project area, so there will be no visual intrusion from the transmission line.

The other architectural resource is a ca. 1849 cemetery (U/23/0277) (Figure 22). The site appears to be a small family cemetery located in a pasture off Baton Rouge Road. While the number of burials is unknown, two marble headstones, three marble footstones, and about 40 fieldstones were observed. The surname of the two marked graves is Carter, and have death dates of 1849 and 1851. The fieldstones may represent earlier burials. The cemetery is located about 225 feet from the project area, but one stone can be seen (Figure 23). However, the cemetery is not fenced and cows currently roam the pasture. One of the headstones is broken in multiple pieces, two of the footstones have been displaced, and it appears that most of the fieldstones have

Figure 23. View of U/23/0277 from the project corridor.

Figure 24. View of project corridor from the cemetery.

been moved (most likely from the cows that have free access to the cemetery).

Even though the cemetery has been damaged, historic research may provide information on the Carter family, and their importance to the Chester area. Therefore, the cemetery is potentially eligible under Criterion B (associated with significant persons) and Criterion D (information potential) for its ability to contribute information of population, demographics, diet and foodways, and health.

While the transmission line is within view of the cemetery, it is unlikely to cause additional intrusion given its proximity next to Baton Rouge Road and the extensive damage from cows. Figure 24 shows the approximate location of the corridor from the cemetery. However, care should still be taken by construction crews to avoid any further damage to the cemetery.

While no comprehensive architectural survey has been performed for this portion of Chester County, a drive of the surrounding roads failed to identify any additional structures that retain enough integrity to be eligible for the National Register of Historic Places.

CONCLUSIONS

This study involved the examination of a 8.7 mile corridor for the Lockhart Transmission Line. The project area is located in the western portion of Chester County. This work, conducted for Central Electric Power Cooperative, examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist the company in complying with their historic preservation responsibilities.

As a result of this investigation, five sites (38CS356-360) and one isolated find (38CS00) were identified. Site 38CS356 is a surface scatter of prehistoric lithics; site 38CS357 is a surface and subsurface scatter of prehistoric lithics; site 38CS358 is a surface scatter of prehistoric lithics; site 38CS359 is a prehistoric and eighteenth to nineteenth century surface scatter; and 38CS360 is a Middle Archaic surface scatter. All five sites are recommended not eligible for the National Register for lack of integrity and the inability to address significant research questions. The isolated find, 38CS00, is a well. By definition, an isolated find does not contain the data sets needed to be considered for the National Register. It is recommended not eligible for the National Register.

A survey of historic sites was conducted within a 0.5 mile APE. Two sites (U/23/0276 and U/23/0277) were found in the project APE. Site U/23/0276 is the ca. 1890 brick John S. Stone house, which is recommended eligible for the National Register for its architectural characteristics (Criterion C). Site U/23/0277 is a ca. 1849 family cemetery that is potentially eligible for its information potential (Criterion D) and its possible connection to significant persons of the area (Criterion B). However, the project area cannot be seen from U/23/0276 and so will not be visually affected. The cemetery (U/23/0277) has been damaged by roaming cows and is already affected by Baton Rouge Road, so the transmission project is not thought to further affect the integrity of the cemetery.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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